West Virginia Department of Environmental Protection
Division of Air Quality

Fact Sheet

For Final Significant Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Significant Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on August 14, 2007.

Permit Number: **R30-07900046-2007 (SM01)**
Application Received: **February 11, 2010**
Plant Identification Number: **03-54-07900046**
Permittee: **Cranberry Pipeline Corporation**
Facility Name: **Heizer Compressor Station**
Mailing Address: **2201 Derricks Creek Road, Sissonville, WV 25320-9517**

Permit Action Number: *SM01* Revised: *October 7, 2010*

Physical Location:	Poca, Putnam County, West Virginia
UTM Coordinates:	432.48 km Easting • 4263.99 km Northing • Zone 17
Directions:	From State Route 62 near Poca, turn onto Heizer Creek Road. Travel approximately 5 miles to the station on the left.

Facility Description

The Heizer Compressor Station is a natural gas transmission facility which consists of a TEG dehydrator, a dehydrator reboiler, a 440 HP natural gas compressor engine, a 880 HP natural gas compressor engine, and four storage tanks (2,100 gallon pipeline fluids, 3,000 gallon new oil, 1,050 gallon used oil, and 1,050 gallon anti-freeze). The control device on the TEG dehydrator was a flare. On February 11, 2010, Cranberry Pipeline Corporation submitted a combined 45CSR13 modification and Title V significant modification permit application to change the control device on the TEG dehydrator from a flare to a BTEX eliminator.

The JATCO No. 5-96 BTEX Eliminator (1C) is a heat exchanger condensing system which is used to capture and recycle BTEX and VOC vapors from the TEG Dehydration Unit (005). The rich (wet) TEG from the bottom of the dehydration unit's contacting tower is used as the coolant in the BTEX eliminator prior to its being regenerated in the Reboiler (004). The reboiler regenerates the rich TEG for reuse in the dehydration unit by boiling off the water through a still vent. The still vent emissions which contain steam, along with VOCs and BTEX, are routed to the BTEX eliminator where the steam is condensed and the VOC and BTEX vapors are injected into the reboiler's burner while it is operating. When the reboiler burner shuts down, the VOC and BTEX vapors are sent to the reboiler's exhaust stack where they are contacted with an igniter.

Emissions Summary

The proposed modification results in the following emission rate changes:

Pollutant	TPY
CO	-0.515
NO_x	-0.1982
SO_2	-0.0025
PM	-0.0383
VOC	-0.283
Benzene	-0.0893
Ethylbenzene	-0.1375
Toluene	-0.3755
Xylenes	-0.3625
n-Hexane	+0.0026
Formaldehdye	0

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit over 100 tons per year of NO_x. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Cranberry Pipeline Corporation is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR13	Preconstruction permits for minor sources.
	45CSR30	Operating permit requirement.
	40 C.F.R. 64	Compliance Assurance Monitoring
State Only:	None	

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit *(if any)*
R13-2694B	August 17, 2010	N/A

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

R13-2694A Changes

R13-2694A was a permit modification, issued on June 14, 2010, which included several restructured conditions, new conditions, and deleted conditions. Many of the changes involved the removal of conditions which applied to the flare and the addition of requirements for the BTEX Elimination System. Also, due to the replacement of the flare with the BTEX Elimination System, the emission point for the TEG Dehydration Unit (005) was changed from 001-006 to 001-04.

R13-2694B Changes

R13-2694B was a Class I administrative update to revise the hourly benzene emission limit in Condition 5.1.4 from 0.01 lb/hr to 0.03 lb/hr (as proposed in the permit application for R13-2694A). The permit was approved on August 17, 2010 and the changes to the hourly benzene emission limits in Condition 5.1.4 have been included in this Title V significant modification.

Other Changes

One change made that was not part of the R13-2694A and B changes was that former Title V permit Condition 4.1.1 was moved to Section 5 as Condition 5.1.10. This move allowed the Title V permit to be structured more like R13-2694B. Also, since the Emission Point ID No. for the TEG Dehydration Unit (005) is now 001-04, it seemed more appropriate to group the Reboiler (004) and TEG Dehydration Unit (005) requirements into one section, since they share the same emission point (001-04).

The following table provides a listing and explanation of the changes made as part of this Title V significant modification:

R30-07900046-2007 Permit Condition No.	R30-07900046-2007-SM01 Permit Condition No.	Description of Change
1.1	1.1	Changed the emission point ID for the TEG Dehydration Unit (005) from 001-006 to 001-04 since emissions from this unit are now routed through a BTEX eliminator and then back to the Reboiler (004). Removed the flare from the Section 1.1 Emission Units Table and added the BTEX Eliminator (1C). Added the Pipeline Liquids Storage Tank (T01) since it was also added to R13-2694A Emission Units Table.

R30-07900046-2007 Permit Condition No.	R30-07900046-2007-SM01 Permit Condition No.	Description of Change
3.4.1	3.4.1	Changed R13 citation from 4.4.1 to 4.1.1 to correspond with R13-2694A.
4.1.1	5.1.10	Moved requirement.
5.1.1	4.1.1, 5.1.1, 5.1.5	Most of the requirements from former condition 5.1.1 were split into three different requirements in the revised permit (4.1.1, 5.1.1, and 5.1.5). The Tables 5.1.1.a, 5.1.1.b, and 5.1.1.c from R30-07900046-2007 were not included in the revised permit because they were excluded from R13-2694A.
5.1.3	4.1.2	Moved requirement.
5.4.2	4.4.1	Moved requirement.
5.1.2, 5.1.4, 5.1.5, 5.1.6, 5.1.7, 5.2.2, 5.3.1, 5.3.2, 5.4.4, 5.4.5, 5.4.8, 5.5.1, and 5.5.2	NA	These requirements applied to the flare which will not be used to control emissions on the TEG Dehydration Unit.
NA	5.1.2, 5.1.3, 5.1.4, 5.1.6, 5.1.7, 5.2.1, 5.2.2, 5.2.3, 5.2.4	New R13-2694A permit conditions.
5.1.8 and 5.1.9	5.1.8 and 5.1.9	Changed the Emission Point ID for the TEG Dehydration Unit from 001-006 to 001-04.
5.2.1	NA	R13-2694A did not include this monitoring requirement.
5.3.3	5.3.1	Renumbered this condition due to removal of other conditions which no longer apply.
5.4.1	NA	This requirement was omitted from R13-2694A.
5.4.3	5.4.1	The requirements both require records of wet natural gas throughput for the dehydration system, but the new requirement is slightly reworded based on R13-2694A.
5.4.6, 5.4.7, and 5.4.9	NA	R13-2694A did not include these recordkeeping requirements.
5.4.10	5.4.5	The requirements both require records of the PTE HAP calculations for the entire facility, but the new requirement is slightly reworded based on R13-2694A.
NA	5.4.2, 5.4.3, 5.4.4	New R13-2694A permit conditions.
NA	5.2.5, 5.2.6, 5.2.7, 5.2.8, 5.2.9, 5.2.10, 5.2.11, 5.4.6, 5.4.7, 5.4.8, 5.4.9, 5.5.1	Addition of CAM requirements.

Compliance Assurance Monitoring (CAM)

According to 40 C.F.R. §64.2(a), CAM applies to a pollutant-specific emissions unit at a major source that is required to obtain a part 70 or 71 permit if the unit satisfies all of the following criteria: 1) The unit is subject to an emission limitation or standard for the applicable regulated air pollutant (or a surrogate thereof), other than an emission limitation or standard that is exempt under 40 C.F.R. §64.2(b)(1); 2) The unit uses a control device to achieve compliance with any such emission limitation or standard; and 3) The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source. 40 C.F.R. §64.2(b)(1)(vi) exempts emission limitations or standards for which a part 70 or 71 permit specifies a continuous compliance determination method.

R30-07900046-2007 included CAM requirements for the flare since the TEG Dehydration Unit (005) was subject to emission limitations and standards for VOCs and HAPs, used a control device to achieve compliance with these emission limits, and had potential pre-control device emissions of VOCs and HAPs which were greater than major source thresholds. Since the changes proposed under R13-2694A and B did not affect applicability of the TEG Dehydration Unit (005) to the CAM requirements of 40 C.F.R. 64, a CAM plan was required for the BTEX Elimination System. Monitoring per the CAM plan for VOC and HAP emissions from the BTEX Elimination System will be as follows:

BTEX Elimination System (1C)	Indicator No. 1[1]	Indicator No. 2[1]
I. Indicator	Glycol inlet temperature, vapor outlet temperature, and the glycol inlet and vapor outlet temperature differential.	Vapor pressure at condenser outlet
Measurement Approach	Thermometers to measure temperatures and temperature differential. *(5.2.5)*	A pressure gauge to measure pressure. *(5.2.6)*
II. Indicator Range	An excursion is defined as a vapor outlet temperature greater than 10 °F above the glycol inlet temperature. Excursions trigger a system inspection and corrective action. *(5.2.5)*	An excursion is defined as a condenser outlet pressure that exceeds 2 ounce/sq. inch. Excursions trigger a system inspection and corrective action. *(5.2.6)*
III. Performance Criteria **A. Data Representativeness**	Thermometers shall be located at the glycol inlet piping and the vapor outlet piping close to the condenser. The minimum acceptable accuracy of these thermometers is ± 2 °F. *(5.2.5)*	A 0-15 ounce/sq. inch pressure gauge shall be installed at the outlet piping close to the condenser. The minimum acceptable accuracy of this pressure gauge is ± 1 ounce/sq. inch. *(5.2.6)*
B. Verification of Operational Status	All manufacturer's recommendations regarding periodic testing/checks for proper installation and operation of the thermometers shall be followed. *(5.2.5)*	All manufacturer's recommendations regarding periodic testing/checks for proper installation and operation of the pressure gauge will be followed. *(5.2.6)*
C. QA/QC Practices and Criteria	Calibration and maintenance of the thermometers will be conducted annually in accordance with manufacturer's specifications. *(5.2.5)*	Calibration and maintenance of the pressure gauge will be conducted annually in accordance with manufacturer's specifications. *(5.2.6)*
D. Monitoring Frequency	Once per 24 hour period. *(5.2.5)*	Once per 24 hour period. *(5.2.6)*
Data Collection Procedures	Daily records of the glycol inlet temperature, vapor outlet temperature, and the temperature differential between the glycol inlet temperature and vapor outlet temperature shall be maintained. For each occurrence that the vapor outlet temperature is greater than 10 °F above the glycol inlet temperature, a record shall be maintained of all corrective actions taken. *(5.4.6)* Records of all periodic testing/checks, calibration, and maintenance shall be maintained. *(5.4.8)*	Daily records of the vapor pressure at the condenser outlet shall be maintained. For each occurrence that the vapor pressure at the condenser outlet exceeds 2 ounce/sq. inch, a record shall be maintained of all corrective actions taken. *(5.4.7)* Records of all periodic testing/checks, calibration, and maintenance shall be maintained. *(5.4.8)*
Averaging Period	NA	NA

[1]Note: The corresponding permit conditions are italicized in parentheses.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

None.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: September 3, 2010
Ending Date: October 4, 2010

All written comments should be addressed to the following individual and office:

Carrie McCumbers
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Carrie McCumbers
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1226 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

One comment was received from Mike Gordon of EPA Region III via e-mail dated October 4, 2010. Mr. Gordon requested that a requirement be added to condition 5.1.7 to address periods when the reboiler burner shuts down and vapors/overheads are sent to the reboiler stack and contacted with an igniter instead of being sent to the flame zone of the reboiler. This request was discussed with Cranberry and they agreed to the addition of the requirement. As a result, Condition 5.1.7.d was added per 45CSR§30-12.7.

On October 7, 2010, Mike Gordon notified the DAQ that the added requirement addressed his comment and that the permit could be issued prior to the end of the EPA comment period on October 18, 2010.